

### REMARKS

Claims 1, 5-7, 9, 25-30 and 69-76 are pending. The allowed claims are 1, 69, 74 and 76 and all other pending claims stand rejected.

Claims 9 and 75 have been objected to for informalities and these claims have been amended as suggested by the Examiner. Claims 7, 25, 27, 70, 71 and 75 have been amended and new claims 77-82 have been added which recite probes or primers of the disclosed sequences greater than 10 nucleotides in length. Support for the latter amendment can be found at page 32 of the application as filed. It is believed that no new matter has been added and entry of the proposed amendments is requested.

#### *35 U.S.C. 112 second paragraph rejections*

Claims 7, 25-30 and 70-72 have been rejected under 35 U.S.C. 112, second paragraph for being indefinite. Claim 7 was rejected for referring to “a polypeptide of SEQ ID NO:2” instead of “the polypeptide of SEQ ID NO:2.” Claim 7 has been amended to recite “the” polypeptide, as suggested by the Examiner. Claims 25, 27 and 29 were rejected as indefinite for reciting or referring to “the DNA” or “the isolated DNA,” because they depend from claim 1, which was previously amended to recite a “nucleic acid.” The claims have been amended where appropriate to recite a “nucleic acid.” Claims 26, 28, 30 and 70 were rejected for not providing a structural relationship between the mutated form of the MiRP1 polypeptide of SEQ ID NO:2 nor defining the metes and bounds of the mutated form(s) of the polypeptide. Claim 70 has been amended to recite a mutated form of the sequence set forth in SEQ ID NO:2, except for at least one of an Ala at amino acid 8; a Glu at amino acid 9; a Thr at amino acid 54; and a Thr at amino acid 57. Claim 71 has been amended to recite a mutated form of the nucleotide sequence set forth in SEQ ID NO:1 or (b) the full complement of said mutated form, wherein said mutated form comprises nucleotides 74-442 of SEQ ID NO:1 except for a nucleotide change selected from the group consisting of an A to a G at nucleotide 95; a C to a G at nucleotide 98; a T to a C at nucleotide 234; and a T to a C at nucleotide 243.

In view of the amendments to the claims and above arguments, it is believed the claims are in condition for allowance and Applicants request that the rejection of the claims under 35 U.S.C. § 112 for being indefinite be withdrawn.

### *35 U.S.C. 102(b) rejections*


Claims 5-7, 9, 72 and 73 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,475,796 issued to Brennan. The Examiner is of the opinion that Brennan “teaches an array, which has every possible 10-mer attached to it. The Examiner has cited Brennan for disclosing all 10-mers and therefore disclosing nucleic acids that comprise a subset of non-identical nucleic acids that could hybridize the claimed nucleic acids as probes or primers, as is recited in claims 5-7, 9, 72 and 73.

It is respectfully submitted that Brennan is not a valid 102(b) reference against the pending claims for at least the following reasons. Assuming, *arguendo*, that Brennan does indeed teach every possible 10-mer, the general description of every possible 10-mers, without more, is a generic description. It is axiomatic that while a species always anticipates a genus, the reverse is not always true and a species claim is patentable over a generic claim. Brennan does not allow one to immediately envisage the nucleotide sequences that are specific for SEQ ID NO:1 and its variants and are useful as probes or primers to recognize the sequence and its variants, whether they are equal to, less than or greater than 10 nucleotides in length. Based on the foregoing, withdrawal of this rejection is requested.

Claims 5-7, 9 and 72 were also rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,491,086 issued to Gelfand et al. The Examiner is of the opinion that Gelfand teaches an oligonucleotide (SEQ ID NO:12) that is 100% identical to nucleotides 87-100 of SEQ ID NO:1 of the present disclosure. Our analysis of bases 4-17 of Gelfand appears to reveal the sequence “AGCTGAGCAAGAG” while bases 87-100 of SEQ ID NO:1 are “CCAATTTCACACAG.” Furthermore, a blast comparison of SEQ ID NO:12 of Gelfand with the KCNE2 gene as in Accession NO:GI27436977 reveals no significant homology between the two sequences. Based on the foregoing, withdrawal of this grounds of rejection is requested.

In view of the amendments to the claims and above arguments, it is believed the claims are in condition for allowance and Applicants request that the rejection of the claims under 35 U.S.C. § 102 as anticipated by Brennan or Gelfand be withdrawn.

In view of the above arguments and amendments to the claims, it is urged that all of the presently pending claims satisfy the provisions of the patent statutes. Reconsideration of this application and early notice of allowance are requested. The Examiner is invited to telephone the undersigned to expedite allowance of this application.

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